

# **ANSWERING CRITICAL QUESTIONS ON MINING IN THE PHILIPPINES**

## **(Phase 2 – Small-scale Mining)**

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Ludwig John H. Pascual  
Sonny N. Domingo  
Arvie Joy A. Manejar

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Philippine Institute for Development Studies  
*Surian sa mga Pag-aaral Pangkaunlaran ng Pilipinas*

## Study objectives

- assess current policy on small-scale mining operations, and their grounding;
- conduct industry analysis and look into the contributions of small-scale mining operators;
- address critical issues being raised as regards small scale mining operations in the country; and
- provide recommendations on possible policy augmentations and implementation arrangements.



## Small-scale Mining | Definition

- *“... mining activities which rely heavily on manual labor using simple implements and methods and do not use explosives or heavy mining equipment”* **Philippines, RA 7076, 1991**
- *“Countries that have specific legal provisions for artisanal and/or small-scale mining sometimes encounter problems with miners trying to define their operations as small-scale or even artisanal in order to avoid having to comply with stronger mining regulations.”* **OECD, 2016**
- Motivations range from poverty (making a living) to entrepreneurial (making profit);
- ASM/SSM is a geological and **economic opportunity**;



## Critical Questions

- A. Where are we now?
- B. Where do we need to go?
- C. How do we get there?



# Content Outline

## A. Where are we now?

1. Status of SSM
2. Costs and Benefits
3. Key issues

## B. Where do we need to go?

1. Policy augmentation
2. Policy implementation and enforcement
3. Imposition of regulatory bottlenecks

## C. How do we get there?

1. National Research Plan
2. Roadmaps
3. Implementation

## A. Where are we now? | Status of SSM | Policy Landscape

NATIONAL BASELINE	NATIONAL FUNCTIONAL	INTERNATIONAL AGREEMENTS
PD 1899	DAO 1992-34	CRC (Convention of the Rights of the Child), 1990
PD 1150	DAO 1997-30	
RA 6969	DAO 2015-03	CONVENTION NO. 138 – Minimum age (18 years old)
RA 7076	EO 79	
RA 7160	BIR RR 04-2020	CONVENTION NO. 182 – Worst forms of child labor convention
RA 7653		Minamata Convention on Mercury
RA 7942		
RA 8371		
RA 9275		
RA 10657		
RA 10688		
RA 11256		

## A. Where are we now? | Status of SSM | Policy Landscape | Implementors

- DENR / MGB, by virtue of DAO 2015-03
- LGU by virtue of RA 7160
- PNP and AFP



## A. Where are we now? | Status of SSM | Industry Analysis | Performance/Capability (Gold)

Data type	Estimates
Number of workers	200K-300K <sup>1</sup> 500K <sup>2</sup>
Number of operations	2,000 – 3,300 <sup>3</sup>
% Male	91% <sup>4</sup>
% Female	3%
% Child	6%
Proportion of unregistered SSM out of total	> 80% <sup>5</sup>

1. Artajo, 2012 and PH-EITI, 2015

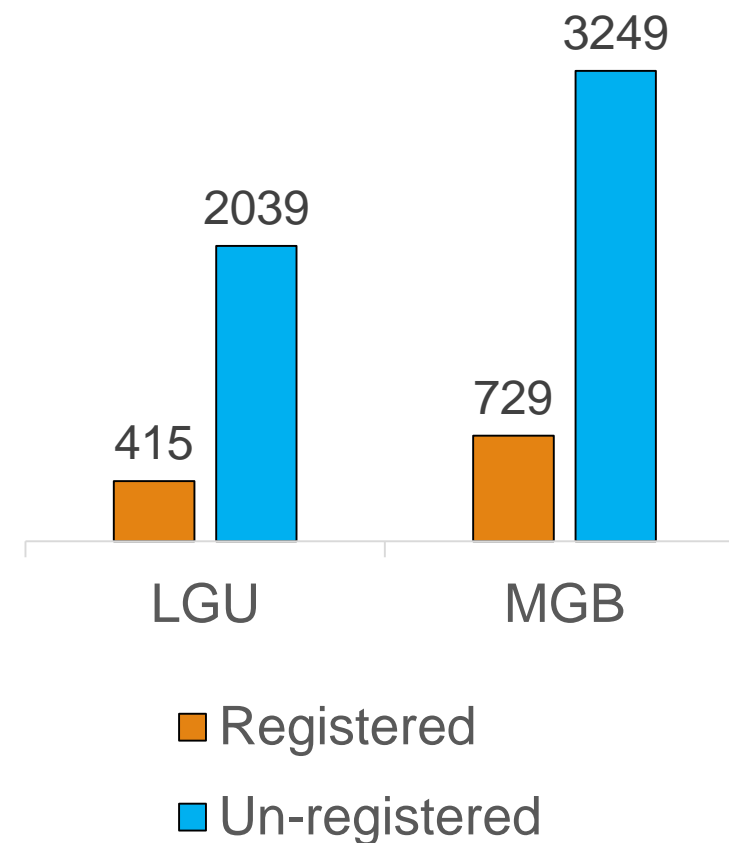
2. International Labor Organization, 2016

3. As calculated from report by Nuñez, 2015, from separate profiling conducted by LGUs and MGB ROs.

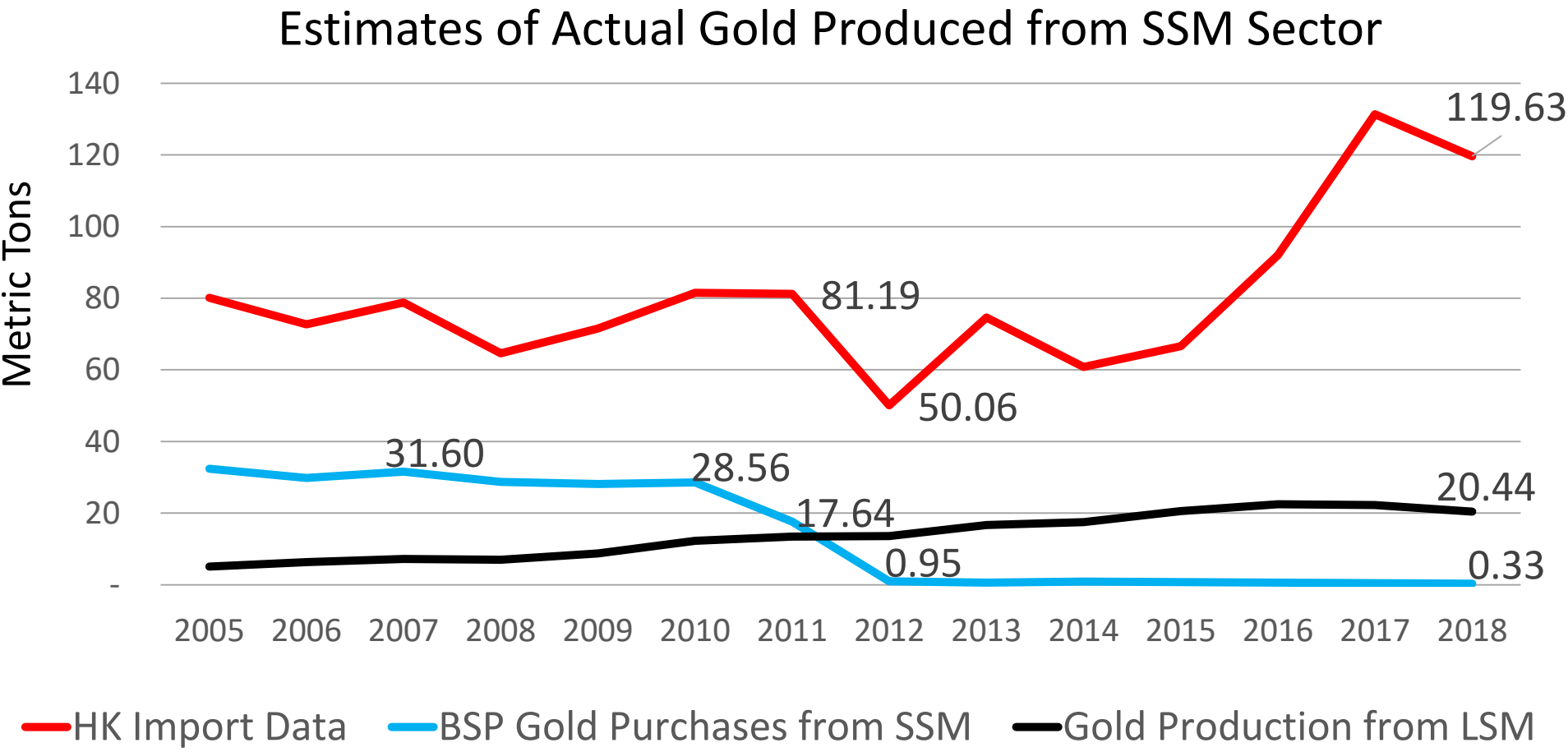
4. Deduced from MGB RO-V inventory, 2017.

5. Deduced from Sison-Arroyo, 2017

6. Gold SSM is only considered. Based on total gold imported into Hong Kong from the Philippines in 2018, less outputs from primary gold LSM sources.



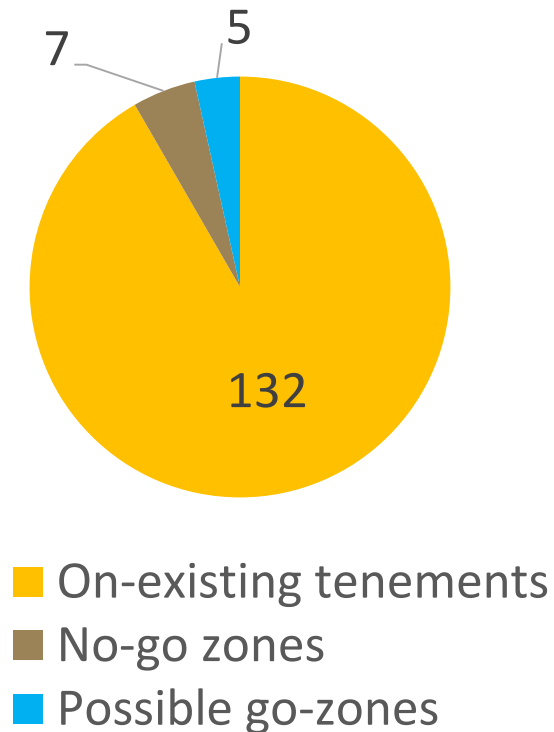
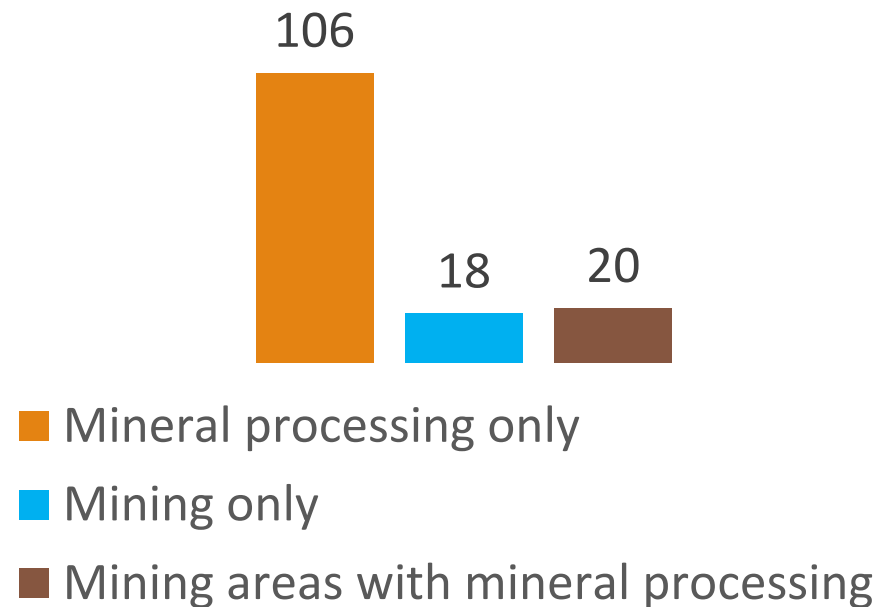
A. Where are we now? | Status of SSM | Industry Analysis | Gold produced by SSM



## A. Where are we now? | Status of SSM | Industry Analysis | MGB RO Inventory (Gold)

- > 3 mineral processing plants per mine
- > 90% are on existing large-scale mining tenements

SSM Inventory 2017, ROV



## A. Where are we now? | Status of SSM | Industry Analysis | Legal vs Illegal)

- < 23% are registered
- < 0.8% of small-scale mining groups can legally operate

<b>Declared Minahang Bayan Areas</b> (with formal clearance from the DENR Secretary)	
Inclusive Years (as of August 2019)	Number of (nationally) Declared MB`areas
1992 - 2014	3
2015	1
2016	1
2017	1
2018	7
2019	4
Total	17
<b>Locally declared</b>	12

Source: MGB 2019

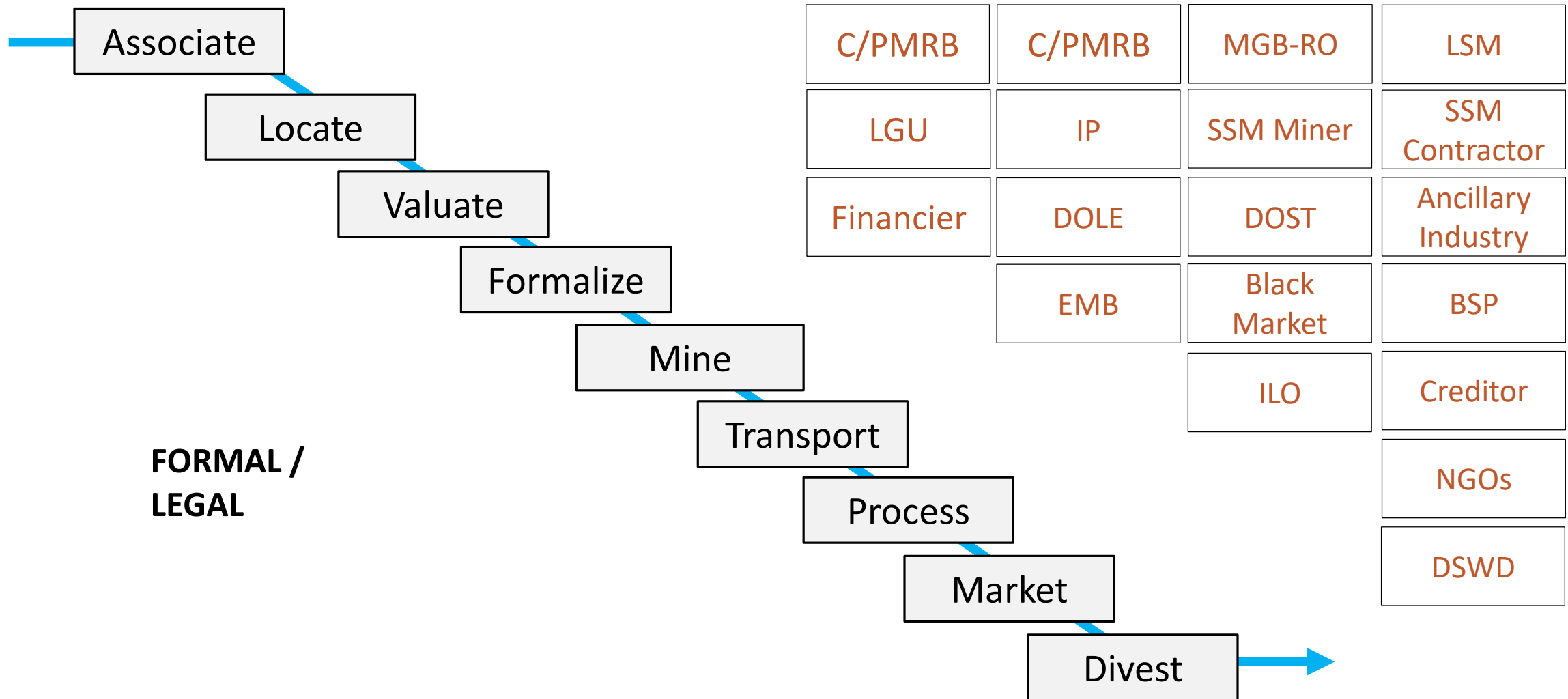
## A. Where are we now? | Status of SSM | Industry Analysis | Stakeholders

Actor/Stakeholder	Degree of Influence		
	National Policy	Local Policy	Welfare of Individual Miner
Provincial/City Mining Regulatory Board	High	High	Low
Mines and Geo-sciences Bureau – Central	High	High	Low
<b>Mines and Geo-sciences Bureau - Regional</b>	<b>High</b>	<b>High</b>	<b>High</b>
Large-scale Mining Companies	High	High	Low
<b>Mayor</b>	<b>High</b>	<b>High</b>	<b>High</b>
<b>Governor</b>	<b>High</b>	<b>High</b>	<b>High</b>
IP Groups	Medium	High	Medium
SSM Contractor	Low	Medium	High
SSM Association (Provincial or Regional)	Medium	High	Medium
Advocacy Groups with Foreign Funding	Medium	Medium	High
Advocacy Groups with without Foreign Funding	Low	High	High
National Commission on Indigenous People	Medium	Medium	Low
Individual miners and families	Low	Medium	High

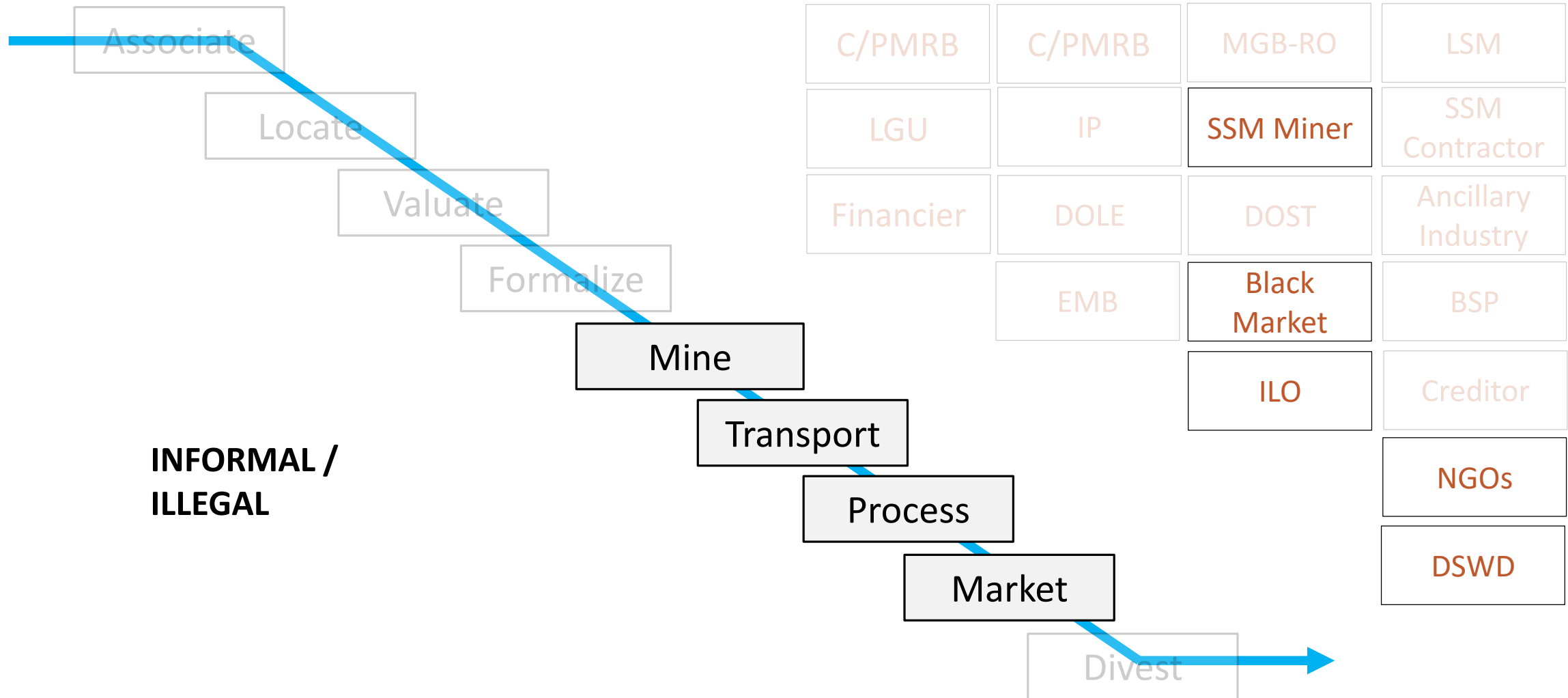
## A. Where are we now? | Status of SSM | Industry Analysis | Stakeholders

Actor/Stakeholder	Degree of Influence		
	National Policy	Local Policy	Welfare of Individual Miner
Financiers	Low	Medium	High
Bangko Sentral ng Pilipinas	High	Low	Low
Gold Buyers (Black market)	Low	Medium	High
Academe	Low	Low	Medium
DOST	Medium	High	Medium
DOLE	Medium	High	Medium
International Labor Organization	High	High	High
TESDA	Low	High	Medium
DOF	Medium	High	Low
NGO_1	Low	Low	Low
<b>NGO_2</b>	<b>High</b>	<b>High</b>	<b>High</b>

## A. Where are we now? | Status of SSM | Industry Analysis | Value chain/ Gov't support



## A. Where are we now? | Status of SSM | Industry Analysis | Value chain/ Gov't support



## A. Where are we now? | Status of SSM | Operational Templates

### 1. Structures

- a) Subsistence mining
- b) Financier-Operator
- c) Financier-Operator-Buyer
- d) Independent entrepreneurial miner

### 2. Tenorial set-up

- a) SSM under LSM
- b) SSM under mining patents
- c) SSM under no-go zones/protected areas
- d) Legal SSM

### 3. Minahang Bayan areas

- a) Operating within “locally declared” MB area (illegal)
- b) Operating within “nationally declared” MB area (legal)



## A. Where are we now? | Status of SSM | Industry Analysis | Benefits

SOCIAL BENEFITS	ECONOMIC POTENTIAL	ECONOMIC POTENTIAL (Cont'd)	MINING
<ul style="list-style-type: none"> <li>• improvement of work force qualification</li> <li>• Livelihood, generation of jobs</li> <li>• Social services</li> </ul>	<ul style="list-style-type: none"> <li>• Local, national taxes contribution</li> <li>• Higher GIR</li> <li>• Ready workforce for LSM (local or abroad)</li> <li>• circulation of currency, investments</li> <li>• fill market niches</li> <li>• social mobility</li> <li>• economic diversification, development of the rural areas</li> <li>• contribution to product diversification and exportation</li> </ul>	<ul style="list-style-type: none"> <li>• development of infrastructure (construction of roads, schools, provision of energy for the communities)</li> <li>• comparative advantage (production with a labor-intensive work force in countries with a vast work force)</li> <li>• internal stable supply of the product but dependent on the national and international market</li> <li>• substitution of imports</li> <li>• Potential contribution to economic development</li> </ul>	<ul style="list-style-type: none"> <li>• the possibility to exploit small deposits</li> <li>• minimal or no exploration</li> <li>• exploitation of tailings</li> </ul> <p>* Improvement opportunity</p>

## A. Where are we now? | Status of SSM | Industry Analysis | Costs

SOCIAL	ECONOMIC	TECHNICAL	ENVIRONMENTAL
<ul style="list-style-type: none"> <li>• indecent, unsafe, unstable work, OSH</li> <li>• more prone to diseases and accidents, disaster risks</li> <li>• child labor</li> <li>• migrants pose threats to local and indigenous communities</li> <li>• negative influence to local ethical values</li> <li>• unreliable social security</li> </ul>	<ul style="list-style-type: none"> <li>• conflicts with LSM</li> <li>• use and quality of water</li> <li>• government (legal conflicts)</li> <li>• deprivation of tax and profits to government</li> <li>• tremendous costs to monitor and regulate the sector</li> <li>• health, social conflict</li> <li>• uncontrolled growth</li> </ul>	<ul style="list-style-type: none"> <li>• high-grading approach; without geologic studies</li> <li>• inefficient processing methods exploitation due to lack of capital to construct appropriate processing facilities</li> <li>• costly logistics</li> </ul>	<ul style="list-style-type: none"> <li>• Unmitigated environmental risks</li> </ul>

\* Improvement opportunity

## A. Where are we now? | Status of SSM | Key Issues

1. Structures/Nature of SSM
2. Monitoring & Enforcement
3. Metallics vs Non-metallics
4. Policy overlaps and/or policy aptness
5. LGU autonomy / consent / oversight
6. Regulatory Framework / Legalities
7. Leakages
8. Environmental issues and concerns
9. Community related concerns
10. Traders, Black Market vs BSP

## **B. Where to go from here?**

1. Formalization
2. Policy Augmentation
3. Policy Implementation & Enforcement
4. Imposition/decongestion of Regulatory Bottlenecks

## B. Where to go from here?

### 1. Formalization

- National research plan with full-scale registration
- Complete profiling and formal inventory of the sector
- Stakeholder analysis
- Minahan Bayan

## B. Where to go from here?

### 2. Policy Augmentation

- Clarification of terminologies
- Redefine equipment use and investment threshold
- Revision of coverage: classification based on scale and commodity
- Clarification on clearances required from the DENR Secretary
- Harmonization of regulatory structures: national vs subnational oversight

## B. Where to go from here?

### 3. Policy Implementation & Enforcement

- Enhancement and strict implementation of People's SSM Program
- Implementation of related/complementary policies
- Non-implementation of obsolete policy, recognition of primacy of RA 7076
- Clarity & transparency of benefit-sharing agreements
- Adjustment/Imposition of higher penalties for violators

## B. Where to go from here?

### 4. Imposition (or decongestion) of regulatory bottlenecks

#### Inputs

- Chemicals and explosive regulation
- Manpower regulations – security for wage-earners, common laborers
- Update of capital and machinery allowed
- Resolution for overlapping tenurial instruments
- Uphold documentary requirements e.g. FPIC, ECC, Local government permits
- Access to credit, capacity inventory



## B. Where to go from here?

### 4. Imposition (or decongestion) of regulatory bottlenecks

#### Operations

- Monitoring and enforcement
- Processing plants accreditation, government template, zoning
- LGU oversight
- Minahan Bayan area declaration
- Material movements
- Sharing and compensation
- Environmental compliance and disaster risk management

## B. Where to go from here?

### 4. Imposition (or decongestion) of regulatory bottlenecks

#### Markets

- Black market vs. BSP
- Market accreditation and accessibility of buyers
- BOC oversight/smuggling
- Materials movements/channels
- Value-adding
- Vertical integration into jewelry industry, gold-laundering

## C. How to get there?

1. National Research Plan
2. Roadmaps
3. Implementation

## C. How do we get there?

### 1. National Research Plan

- Demographic information
- Formality
- Local organization and power dynamics
- Gold and mercury (and other small-scale mining mineral products) trade
- Mercury (and other toxic chemicals) use
- Local development
- Women's role
- Children's role
- Health information

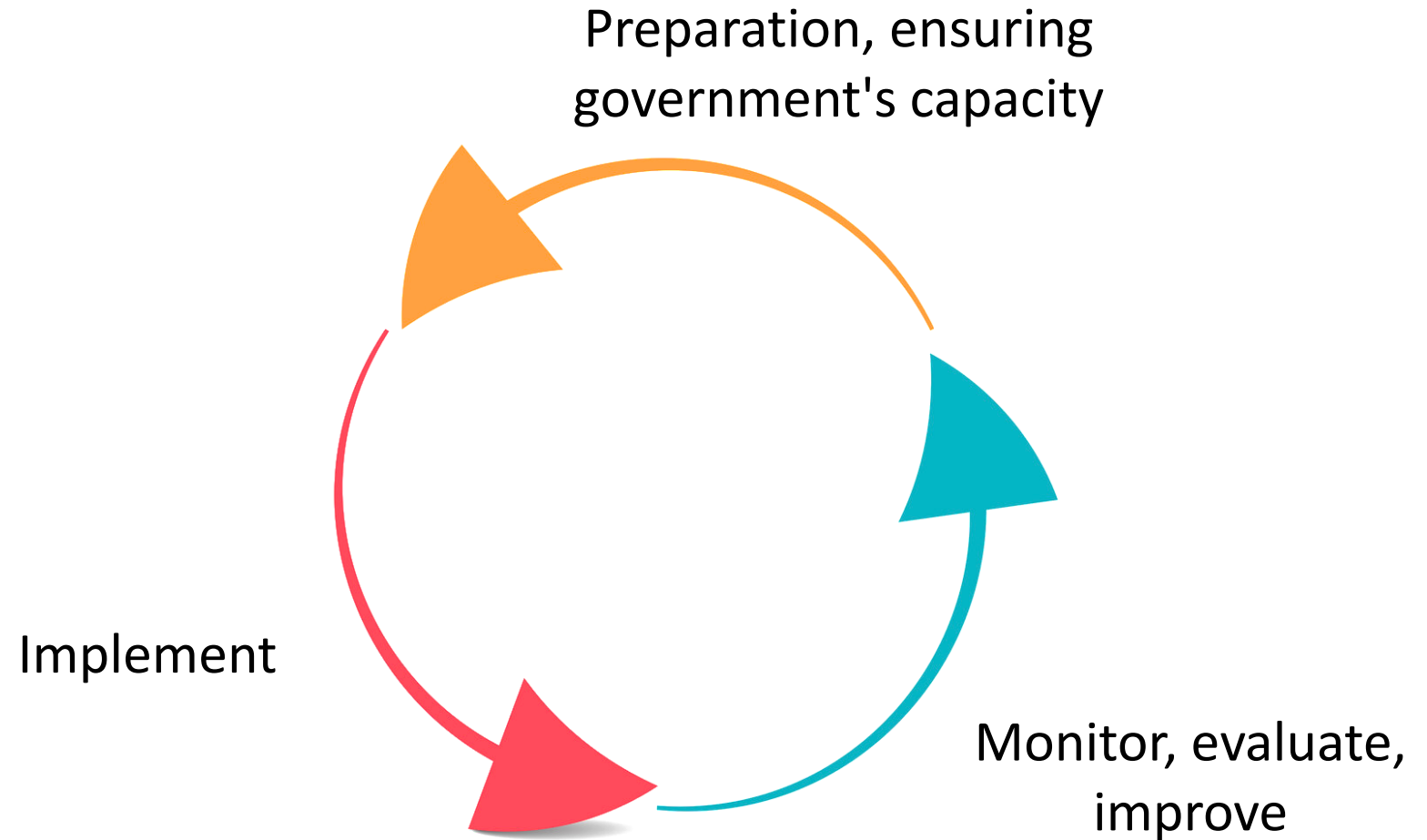
## C. How do we get there?

### 2. Roadmaps

- Formalization and Legalization
- Better working conditions
- Occupational Safety and Health
- Mercury use eradication
- Technology
- Environmental structures
- Funding support where needed
- More ....

## C. How do we get there?

### 3. Implementation





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# Thank you!

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